

# **THE IMPACT OF HUMAN RESOURCES INFORMATION SYSTEMS IN IMPROVING THE TRAINING PROCESS IN INDUSTRIAL FIRMS: - AQABA CASE STUDY**

***Omar (mohamad raouf) Hayajneh***

Department of administration and financial sciences, AlBalqa Applied University, Jordan,  
Aqaba

***Burhan M Awad Al-Omari***

College of Administrative and Finance Business Studies Department, The University of  
Jordan

***Hisham Othman Al-Mobaideen***

Management Information Systems Department, Mu'tah University

***Sattam rakan allahawiah***

Department of administration and financial sciences, AlBalqa Applied University, Jordan,  
Karak College

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## **Abstract:**

This study aimed to describe the impact of human resources information systems in identifying training needs, defining the goals of training programs, the implementation of training and evaluation and follow-up the effectiveness of training in industrial enterprises in Aqaba city , the study found that there was a link between human resources information systems and between training needs, defining the goals of training programs, the implementation of training and evaluation and follow-up the effectiveness of training in industrial enterprises in Aqaba city. The most important recommendation of the study was that the responsible people of human resources information systems in industrial firms in the city of Aqaba should make it capable of selecting training needs on the company in the long term, to identify individual needs, measure goals through training programs, overcome the difficulty in dealing with the human resources management information system at the implementation of training programs, and the need to use standard tools to observe the behavior of the workers after the implementation of training programs.

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**Keywords:** Human resources, management, information systems, training process, industrial, human resources information systems

### **Introduction:**

Information plays an important role in the transfer of mankind from ancient times to the present, where this age is described as information era because of the importance of information in conducting of people life especially economically. So attention has increased toward information systems and investment in it to reach an accurate output, able to meet the user's needs, through the development, activation and increase the efficiency of its components.

The design of the human resources information systems assists in measuring the value of the human resources in a fiscal way and contributes to plan these resources on the economic unit, as well as the national one through the contribution in drawing the labor and employment policies and the other linked policies as migration, payments, promotions, and motives in a scientific way. The importance of human resources spurs out in the industrial and service projects through affecting the market value of these economic units in the bank and commercial projects, as to their contribution to the economic processes used by these units and what these resources could form and occupy of the tangible and intangible that could affect in a way or another on the performance continuation of these corporations, as a result, it is necessary to concern all the data related to human resources to be possible to get their benefit in all domains that need more improvement in performance.

The increasing pressure to support strategic objectives and the greater focus on shareholder value have led to changes in both job content and expectations of HR professionals (Ball, 2000). Similarly, Schuler et al., (2001) and Mayfield et al., (2003) noted that one such major changes included contemporary use of Information Systems (IS) in support of the HRM process. More so, a careful analysis indicated that increased human resource information systems (HRIS) usage enabled improved professional performance and thus facilitated involvement in internal consultancy activities.

Management attention has increased in the importance of the human element within the Organization, seek to empower employees, provide opportunities for continuous learning and foster the spirit of partnership and cooperation to achieve the desired objectives of the business. Human resources information systems is one of the most important systems used in the facility, Because the effective use of these systems is useful in achieving the Organization's objectives, and performance development through proper application, These

systems help to improve the performance of the human resources function by providing managers with information necessary to support resolutions on human resources management. The industrial sector, Like other sectors need these systems, especially in light of the fierce competition, where the need to increase the efficiency and effectiveness of human resources to exploit most of the limited resources available for more output and adequate quality, Particularly through control and reduce costs.

### **Problem statement**

The study came to answer the question about the role of the human resources information systems in identifying training needs, Defining the goals of training programs, The implementation of training and evaluation, and follow-up the effectiveness of training in industrial enterprises in Aqaba city

### **Research Hypotheses:**

In order to answer the research questions of this study we will develop the following hypotheses:

H1:- There is a statistically significant relationship between human resources information systems and training needs in industrial firms in the city of Aqaba.

H2:- There is a statistically significant relationship between human resources information systems and defining the goals of training programs in industrial firms in the city of Aqaba.

H3:- There is a statistically significant relationship between human resources information systems and the implementation of training in industrial firms in the city of Aqaba.

H4:- There is a statistically significant relationship between human resources information systems and the evaluation and follow-up of the effectiveness of training in industrial enterprises in Aqaba city

### **Objectives of the study:**

The study seeks to demonstrate human resources information systems relationship with in identifying training needs, defining the goals of training programs, the implementation of training and evaluation and follow-up the effectiveness of training in industrial enterprises in Aqaba city

### **Importance of the study:**

Under the large and increasing competition faced by manufacturers in terms of quality and cost it became a necessity for these enterprises to understand that human resource is the foundation of any development process leading to greater competition and customer satisfaction so they can continue in the market, hence the importance of the study looking at the role of the human resources information systems and in the vital area in Jordan, which Aqaba free economic area.

### **Research Methodology:**

In order to investigate the impact of human resources information systems in identifying training needs, defining the goals of training programs, the implementation of training and evaluation and follow-up the effectiveness of training in industrial enterprises in Jordan environment, a survey instrument will be developed to collect data to evaluate the hypotheses. It will be conducted in Jordanian environment. Three sources of information will be used to identify survey items: a review of the pertinent literature, Interviews with the experts, Interviews are conducted with IT opinion leaders and commentators. Participants in these interviews include industry association executives, representatives of IT service providers, academics and government bodies. Interviews with the managers or people with responsibility for the management of technology in their business. The study depends on descriptive analytical, where preliminary data were collected and statistically analyzed from the study population to reach results related to the study axes.

The questionnaire is the primary data collection tool designed to measure the existing realities in the study population. 118 questionnaire have been distributed to various companies, 105 questionnaire have been restored. The questionnaire method was based on the closed questions(likert scale), with available answers (in a very large degree, in a large degree, in a moderate degree, in a weak degree, in a very weak degree). And the previous answers have been weighting by degrees (5, 4, 3, 2, 1) respectively.

### **Statistical Process:**

To answer questions about the study and test the validity of hypotheses. Descriptive Statistic Analytical methods (by using SPSS. 10) were used.

1. Descriptive Statssts Measures were used to answer the question of the study and to organize the dimensions downwardly as well as to describe the characteristics of the sample by using percentages.
2. Multible Regression Analysis was used in order to test the validity of the study and the effect of the independent variable and its dimensions in the dependent variable and its dimeminssions.
3. Analysis of test T. (One Sample Test) to test the impact of the independent variable on the dependent variable.
4. Stepwise Multible Regression Analysis was used for using the independent variables in predicting equation of dependent variable.
5. Variance inflation Factory (VIF) and Tolerance were used for insuring that there is no high correlation between the independent variables.

### **Instrument Validity:**

The validity of the questionnaires was constructed by reviewing each of its questions by the supervisor and professional doctors at Albalqa applied university and some Jordanian Universities. To verify the validity of the paragraphs of questionnaires, remarkable amendments have been made to reformulate some of the paragraphs, and the required adjustments. The results were achieved accurately to maintain a balance between the contents of questionnaires and its paragraphs. The following checklist was used to review the questionnaire instrument:

- Will the words be uniformly understood?
- Do the questions contain abbreviations or unconventional phrases?
- Are the questions too vague?
- Is the question too precise, biased or objectionable?
- Is it a double-barrel question?

Does it have a double negative?

- Are the answer choices mutually exclusive?
- Has too much knowledge been assumed?
- Is the question technically accurate?
- Are the questions too cryptic?

### **Research Assumptions**

To ignore any other influential factors, which may affect the results of this study, the following can be assumed as research assumptions:

- 1-The selected sample was assumed to be a suitable representation of the study population.
- 2- The respondents was assumed understand every question in the study tool, and answered precisely and honestly.
- 3-The instrument and statistical techniques were effective, valid, and suitable for this kind of studies.

### **Literature Review:**

Human resource information systems HRIS provides management with strategic data not only in recruitment and retention strategies, but also in merging HRIS data into large-scale corporate strategy. The data collected from HRIS provides management with decision-making tool. Through proper HR management, firms are able to perform calculations that have effects on the business as a whole. Such calculations include health-care costs per employee, pay benefits as a percentage of operating expense, cost per hire, return on training,

turnover rates and costs, time required to fill certain jobs, return on human capital invested, and human value added. (Asafo,2007,).So there have been many studies in the area of evaluating human resources information systems as one of the most important issue in recent times. Many of the studies have addressed evaluating human resources information systems from several points of view.

The study of Mohammad and Haroon Tarawneh(2012) aimed to demonstrate the impact of the effectiveness of the Application of human Resources Management System in Corporate Performance which perspective of workers in the Banking Sector in Jordanian Firm, The study found asset of results, including: 1) There is a significant effect between the quality of the output of human resources information system and institutional performance in banking sector in the Jordanian firm. 2) There is a statistically significant effect between motives and corporate performance in the banking sector in the Jordanian firm. 3) There is a significant effect between training and organizational performance in the banking sector in the Jordanian firm.

Jaber (2011)in his study identify the impact of environmental factors on the efficiency of internal organizational human resources management functions in the public institution for social security, the study found that there is an impact of environmental factors on the efficiency of internal organizational human resources management functions in the public institutions of social security. One of the most important recommendations was to focus on each delegation of authority, specialized work and moral incentives for staff

Al-kharabsheh study (2010) aimed to identify the impact of administrative policies on human resources efficiency in Jordanian public institutions from the point of view of managers and identify factors and positive practices enhancing human resources efficiency. The study found that there are efficient medium for human resources within public Jordanian institutions. And no trace of administrative policies on the efficiency of human resources in institutions due to gender, age, number of years in work and qualification variables. The study recommended the need to stop using patronage and meduime when recruiting for the jobs.

Alfarsi (2006) describe the impact of the human resources management functions in achieving organizational change at The Sultanate of Oman central ministries. The study found that there are positive results for these posts on achieving organizational change. The study recommended activating human resources management and increase depending on them.

The study of Iee and Wesley (2002) Weighted scale has been used in this study to measuring the performance of human resources information systems in organizations. Found that many challenges facing Human resources management firstly , how to measure the

performance of human resources information systems in order to justify the added value from the use of these systems to accomplish organizational goals. It showed the benefits of measuring the performance of human resources information systems using a weighted grading as it is single, simple, easy to understand and communicate with others, and is considered a way to determine whether the overall system performance improves over time.

Gerardine (2001) study describes the status quo of human information systems to support and improve the status of the Organization. The study found that the role of interconnected and symmetric information systems in the same industry where human resources information systems is not clear any standard will not continue, and that the topics themselves will be controversial. And the study concluded that there would be a clear lack of competencies of managers of system functionality. Because efficient Director needs to be specialized in human resources function in addition to having skills in information systems.

### **Data analysis and discussion:**

The purpose of this study was to assess the impact of human resources information systems in identifying training needs, defining the goals of training programs, the implementation of training and evaluation and follow-up the effectiveness of training in industrial enterprises in Aqaba city. Therefore, the results of this study are presented and analyzed in this section. The study used a descriptive analysis to describe the characteristics of the respondents. The research hypotheses were presented and tested, ANOVA was used to measure the differences between the sample groups, Pearson Correlation was used to explore the correlation between the study variables (dependent and independent variables), and Stepwise multiple regression was used to test the hypotheses.

### **Tool stability:**

\* Tool stability has been tested using Cronbach's alpha, table (1) shows that all values are higher than 0.60 which mean that there study tool is stable.

Dimension	Alpha's value
Identify training needs	0.78
Defying the needs of Training programs	0.80
Implementation of training programs	0.73
Evaluation and follow-up of training effectiveness	0.81
Total	0.86

### **Characteristics of the respondents:-**

Table (2) indicates that 76.19% of the study samples were male. And the remaining (23.81%) respondents female. These findings show that the most employees in the listed

firms are from men and the reason might be to the nature of the companies in these sectors. It also showed that 39.05% of the sample are equal to or older than 45 years, and 32.38% aged from 35- and less than 45, 24.76% between the ages of 25 – and less than 35, 3.81% under the age of 25. The findings of this table show that the majority of the respondents lie in the third level few of the respondents were from the second level and it indicates that 39.05% of sample are holders of a Bachelor degree, 30.49% of them holders of a diploma, 20.95% of respondents with a high school diploma, and 8.57% of whom hold a master's degree, and 0.95% of whom hold a PhD. So the most respondents were from Bachelor Degree and this means that most of the workers whose work in firms are from Bachelor Degree, and this is a clear evidence for the validity of the study.

This Table (2) clarifies that 52.38% of the of the respondents has experience of 15 years or more, 19.05% of respondents have less than 5 years experience, and 17.14% have experience range between 11-15 years., and 11.43% of them ranging in experience between 5-10 years. The findings showed that the least respondents are from the last level, and the majority of the respondents whose years of experience more than 15 years experience. it illuminated that there are That 63.81% of the sample of the study are staff, and 28.57% are Chiefs, and 5.71% serving as Deputy Director, and 1.90% of those serving as Director.

Table .2: Description of the characteristics of a study sample

	Variable	frequency	percentage%
Gender	Male	80	76.19
	Female	25	23.81
Age	less than 25	4	3.81
	25 – less than 35	26	24.76
	35 – less than 45	34	32.38
	Equal or more than 45	41	39.05
Qualification	Secondary	22	20.95
	Diploma	32	30.48
	BS	41	39.05
	Master	9	8.57
	PhD	1	0.95
Experience	less than 5	20	19.05
	5-10	12	11.43
	11-15	18	17.14
	More or equal 15	55	52.38
Career	Manager	2	1.90
	Deputy Director	6	5.71
	Head of department	30	28.57
	Staff	67	63.81



**Testing Hypotheses:**

H1:- There is a statistically significant relationship between human resources management information systems and training needs in industrial firms in the city of Aqaba.

As table 3 shows that, with the exception of paragraphs 2 and 6, all paragraphs got arithmetic mean greater than 3.00 and got significant observation level less than 0.05, i.e. all those paragraphs are of statistical significance. paragraph No. 5 came first with 4.18 arithmetic mean, which means that the greater impact of the human resources information system is in the area of providing the requirements for training, paragraph 3 which measure human resources management information system assist to identify company training needs in the short term came in last place among the statistically accepted paragraphs 3.66 arithmetic mean.

Paragraph 2 which measures the help of human resources management information system in identifying company training needs in the long run, although it got a arithmetic mean greater than 3.00 but it got observation level greater than 0.05, i.e. it's not statistically significance. paragraph 6, which measures human resources management information system assist to identify individual needs got arithmetic mean less than 3.00, it is not statistically significance.

All paragraphs combined got 3.50 arithmetic mean, which is greater than 3.00, and level 0.00 observation level, which is less than 0.05, i.e. that there is statistically significant relationship between human resources management information systems and training needs in shipping companies operating in Aqaba.

Table (3): arithmetic averages, standard deviation, t value and significance observation level in defining training needs:

No.	Paragraph	arithmetic average	standard deviation	t value	significance observation level
1.	Human resources management information system help in identifying training needs at the unit level	3.73	1.15	5.21	0.00
2.	Human resources management information system helps in identifying company training needs in the long term.	3.06	1.54	0.32	0.75
3.	Human resources management information system helps in identifying company training needs in	3.66	1.09	4.91	0.00

	the short term.				
4.	Human resources management information system helps in identifying training requirements according to the job description.	3.97	0.74	10.76	0.00
5.	human resources management information system provides training requirements	4.18	0.63	15.42	0.00
6.	Human resources management information system helps in identifying individual needs.	2.42	1.30	-3.65	0.00
	Total	3.50	0.61	6.70	0.00

H2:- There is a statistically significant relationship between human resources information systems and defining the goals of training programs in industrial firms in the city of Aqaba.

As table 4 shows that, with the exception of paragraphs 8, all paragraphs got arithmetic average greater than 3.00 and got significant observation level less than 0.05, i.e. all those paragraphs are of statistical significance. paragraph No. 9 which measures human resources management information system help in analyzing and processing goals to determine the quality of training programs came first with 3.94 arithmetic mean, paragraph 12 which measure if software are suitable and appropriate in terms of the objectives that have been previously selected for training programs in the organization, in last place among the statistically accepted paragraphs with 3.81 arithmetic average.

Paragraph 8 which measure the work of the human resources management information system to measure goals through training programs, although it got an arithmetic mean greater than 3.00 but it got observation level greater than 0.05, i.e. it's not statistically significance. All paragraphs combined got 3.73 arithmetic mean, which is greater than 3.00, and 0.00 observation level, which is less than 0.05, i.e. that there is statistically significant relationship between human resources management information systems and defining the goals of the training programs in the shipping companies operating in Aqaba.

Table No. (4) Arithmetic average, standard deviation, the t value and private observation level related to setting the goals of training programs:

No.	Paragraph	arithmetic average	standard deviation	t value	significance observation level
7.	human resources management information system helps in clarifying the goals through training programs	3.83	1.18	6.49	0.00
8.	human resources management information system works to measure goals through training programs	3.01	1.51	0.07	0.94
9.	human resources management information system helps in analyzing and processing goals to determine the quality of the training programs	3.94	1.03	8.46	0.00
10	human resources management information system helps to meet the requirements of the training staff	3.90	1.06	7.81	0.00
11.	equipment (Hardware) consider appropriate in terms of the objectives that have been developed and previously selected for organization training programs	3.88	1.10	7.45	0.00
12	equipment (Software) consider appropriate in terms of the objectives that have been developed and previously selected for organization training programs	3.81	1.16	6.49	0.00
13	Total	3.73	0.81	8.31	0.00

H3:- There is a statistically significant relationship between human resources management information systems and the implementation of training in industrial firms in the city of Aqaba.

As table 5 shows that, with the exception of paragraphs 20 and 22, all paragraphs got arithmetic mean greater than 3.00 and got significant observation level less than 0.05, i.e. all those paragraphs are of statistical significance. paragraph No. 13 which measure the work of

the human resources management information system to manage training programs came first with 4.02 arithmetic mean, paragraph 19 which measure the extent of having a written guide for the used procedures on how to use the human resources management information system in training programs, in last place among the statistically accepted paragraphs with 3.59 arithmetic mean.

Paragraph 20 that measure the lack of difficulty in dealing with the human resources management information system when implementing training programs, got 3.00 arithmetic mean i.e. it's not statistically significance. Paragraph No. 22, which measure the lack of resistance from some staff to the update on the applied training programs, got 3.00 arithmetic mean, i.e. It's not statistically significance. All paragraphs combined got 3.58 arithmetic mean, which is greater than 3.00, and 0.00 observation level, which is less than 0.05, i.e. that there is statistically significant relationship between human resources management information systems and implementation of training in the shipping companies operating in Aqaba.

Table No. (5) Arithmetic average, standard deviation, the t value and private observation level related to setting the goals of training programs:

No.	Paragraph	Arithmetic average	standard deviation	t value	significance observation level
13	human resources management information system manage training programs	4.02	1.02	9.33	0.00
14	Information management system of human resources management on the implementation of training programs based on identified training methods.	3.83	1.10	6.98	0.00
15	Human resources management information system increase staff efficiency through training programs.	3.66	1.19	5.15	0.00
16	Human resources management information system increase organization efficiency through training programs	3.76	1.03	6.82	0.00

17	human resources management information system increase the Organization's productivity through the implementation of training programs	3.64	1.20	4.95	0.00
18	equipment (Hardware) used in training programs achieve the reason of training implementation	3.73	1.10	6.18	0.00
19	There is a written guide for the used procedures on how to use the human resources management information system in training programs	3.59	1.22	4.50	0.00
20	there is no difficulty in dealing with the human resources management information system when implementing training programs	2.72	1.57	-1.65	0.10
21	human resources management information system affects the staff commitment of training programs	3.99	1.07	8.58	0.00
22	there is no resistance from some staff to the update on the applied training programs	2.90	1.44	-0.67	0.50
	Total	3.58	0.68	7.98	0.00

H4:- There is a statistically significant relationship between human resources management information systems and follow up training evaluation effectiveness of the industrial companies in the city of Aqaba.

As table 6 shows that, with the exception of paragraphs 23, 29 and 34, all paragraphs got arithmetic mean greater than 3.00 and got significant observation level less than 0.05, i.e. all those paragraphs are of statistical significance. paragraph No. 30 the extent to which human resources management information system adopt a methodology in the employment of trainees came first with 3.97 arithmetic mean, paragraph 27 the indispensability of the training programs organized by the human resources management information system, in last place among the statistically accepted paragraphs with 3.60 arithmetic mean.

Paragraph 23 that measure human resources management information system continuously providing of a periodic or special reports monitoring training effectiveness, got

3.00 arithmetic mean i.e. it's not statistically significance. Paragraph No. 29, that measure the human resources management information system making of a competitive program for staff to fill vacant posts got 3.00 arithmetic mean i.e. it's not statistically significance. Paragraph 34, that measure the use of the human resources management information system standard tools to monitor working staff behavior after implementing of the training programs, got 3.00 arithmetic mean i.e. it's not statistically significance. All paragraphs combined got 3.33 arithmetic mean, which is greater than 3.00, and 0.00 observation level, which is less than 0.05, i.e. that there is statistically significant relationship between human resources management information systems and the evaluation and follow up of training efficiency in the shipping companies operating in Aqaba.

Table No. (5) Arithmetic average, standard deviation, the t value and private observation level related to evaluation and follow-up of training effectiveness:

No.	Paragraph	Arithmetic average	standard deviation	t value	significance observation level
23	human resources management information system offers continuously periodic or special reports monitoring training effectiveness	1.95	1.46	-6.33	0.00
24	human resources management information system provides standards to measure the effectiveness of training	3.84	1.08	6.88	0.00
25	people working on the human resources management information system have different specialization	3.66	1.19	4.89	0.00
26	human resources management information system have a periodically training to develop abilities and skills	3.71	1.04	6.04	0.00
27	training programs organized by the human resources management information system are indispensable	3.60	1.22	4.31	0.00
28	training increases job satisfaction for staff working in the organization	3.71	1.11	5.64	0.00
29	human resources management information	1.88	1.21	-8.08	0.00

	system making of a competitive program for staff to fill vacant posts				
30	human resources management information system follow a certain methodology in recruiting trainee	3.97	1.09	7.86	0.00
31	equipment (Hardware) are appropriate for organization training programs needs	3.90	1.14	6.88	0.00
32	equipment (Software) are appropriate for organization training programs needs	3.90	1.26	6.23	0.00
33	human resources management information system detect the deficiency and difficulties that the company suffers form	3.88	1.06	7.29	0.00
34	the use of the human resources management information system standard tools to monitor working staff behavior after implementing of the training programs	1.92	1.31	-7.25	0.00
		3.33	0.55	5.20	0.00

### Conclusion:

In addition to the descriptive analysis applied in order to understand better the characteristics of the sample, statistical tests were used to examine the relation between the independent variable (human resources information system) and dependent variables, such as training needs, setting the goals of training programs, and evaluation and follow-up of training effectiveness. Following is a review of the results:

1. There is a statistically significant relationship between human resources information systems and training needs in industrial firms in the city of Aqaba. Where the system identify training needs at the unit level, and help to identify training needs in the company in the short term, commensurate with the job description, and provides conditions for training. But it does not help to identify company training needs in the long term, and does not help to determine individual needs.

2. There is a statistically significant relationship between human resources management information systems and defining the goals of training programs in industrial firms in the city

of Aqaba. where this system works to clarify goals through training programs, helps to analyze and process goals to determine the quality of the training programs, help to achieve staff training requirements, and the used equipment(Hardware) are consider proper and appropriate in terms of the objectives that have been developed and previously selected for organization training programs, and the( software) used are appropriate and proper for the objectives that have been developed and previously selected for organization training programs. but it does not work on measuring goals through training programs.

3. There is a statistically significant relationship between human resources management information systems and the implementation of training in industrial firms in the city of Aqaba. Where it manage the implementation of training programs based on training ways which was originally identified, increase the efficiency of staff through training programs, increase the efficiency of the Organization through training, increases the productivity of the Organization through the implementation of training programs, equipment (Hardware) used in training programs helps in the implementation of training, there is written guide for the procedures used on how to use the system in training programs and the system affects the obligation of staff to training programs. But there is difficulty in dealing with the system when implementing training programs, and there is resistance from some staff to update that training programs when applies.

4. There is a statistically significant relationship between human resources management information systems and training evaluation and follow up of the effectiveness of the industrial companies in the city of Aqaba. Where the system provides standards for measuring the effectiveness of training and working personnel on the system are of different specializations, workers in the system have periodical training to develop their abilities and skills, and training programs are indispensable for the organization, training increasing job satisfaction for the employees in the company, the system use a methodology in the employment of the trainees, (Hardware) equipment used are appropriate with the requirements of the training programs, and used software are appropriate with the requirements of the training programs, the system discovers difficulties and mistakes that the company suffer form. But the system does not provide regular or special reports that cover monitoring training effectiveness and does not work competitively to employ staff to vacant posts; the system does not use standard tools to continue working behavior after the implementation of training programs.



### **Recommendation:**

- 1) The study recommends the human resources management information systems responsible people in industrial firms in the city of Aqaba to make it able to identify company training needs in the long term, and to identify individual needs.
- 2) Industrial companies in Aqaba should help in the development of human resources management information system to measuring goals through training programs.
- 3) Overcoming the difficulty in dealing with the human resources management information system at the implementation of training programs.
- 4) Industrial companies in Aqaba should study the reason of resistance to the applied update from some staff to training programs and try to get rid of it.
- 5) Industrial companies in Aqaba city should work to make human resources management information system able to provide periodic or special reports to monitor training effectiveness continuously.
- 6) Make a competitive program for vacant staff jobs in industrial companies in Aqaba.
- 7) The need to use standard tools to monitor working behavior after implementing training programs in industrial firms in the city of Aqaba.

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